NONPROVISIONAL PATENT APPLICATION
Navy Case No. 84,633
Keith E. Sommer and Henry P. Stottmeister
Non-Kinking Oil-Filled Acoustic Sensor Stave

ABSTRACT

A hydrophone stave comprises a tubular member, a braided cord (or similar flexible structure), cylindrical hydrophones, pins, two plugs and two couplings. The hose (made of a thermoplastic material) is corrugated or convoluted, and is cuffed at both ends to permit a plug to engage at each end. Each coupling includes a wire rope (or similar flexible structure). Each hydrophone has a longitudinal through-aperture (through which the braided cord passes) and a perpendicularly transverse through-aperture (through which a pin passes while also passing through a void created between strands of the braided cord). The stave is suitable for incorporation into a hydrophone array assembly providing for a selected arrayal of hydrophones, e.g., an assembly including two opposite frames united therebetween by numerous congruous parallel staves, each stave including equally spaced hydrophones, each coupling linking a plug with a frame so that the staves are selectively arranged.